IN THE CLAIMS

1-35. (Cancelled)

36. (New) A method of data communications, comprising:

receiving a data packet having classification information;

identifying a Quality of Service (QoS) to associate with the data packet based at least in part on the classification information;

placing the data packet in a QoS queue corresponding to the associated QoS; and

scheduling the data packet to be transmitted with other data packets from the QoS queue at or above a minimum bandwidth allocation corresponding to the associated QoS.

37. (New) The method of claim 36, wherein identifying the QoS based at least in part on the classification information comprises identifying the QoS based at least in part on a source identifier and a destination identifier for the data packet.

38. (New) The method of claim 36, wherein identifying the QoS based at least in part of the classification information comprises identifying the QoS based at least in part on a packet type of the data packet.

39. (New) The method of claim 36, further comprising

assigning a queue threshold number to the QoS queue; and

wherein placing the data packet in the QoS queue further includes adding the data packet to the QoS queue if a number of packets in the QoS queue does not exceed the threshold number.

40. (New) A network device comprising:

a receive port to receive a data packet having classification information;

a logic circuit to identify a Quality of Service (QoS) to associate with the data packet based at least in part on the classification information, and place the data packet in a QoS queue corresponding to the associated QoS; and

a scheduler to dequeue the data packet with other data packets from the QoS queue and allocated at least a minimum bandwidth corresponding to the associated QoS for transmission.

41. **(New)** The network device of claim 40, wherein the logic circuit identifies the QoS based at least in part on a source identifier and a destination identifier for the data packet.

42. **(New)** The network device of claim 40, wherein the logic circuit identifies the QoS based at least in part on a packet type of the data packet.

43. **(New)** The network device of claim 40, further comprising the logic circuit to assign a queue threshold number to the QoS queue, and wherein the logic circuit adds the data packet to the QoS queue if a number of packets in the QoS queue does not exceed the threshold number.